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# 2024 HealthHelp Shoulder Procedures

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## ***Musculoskeletal Procedures***

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## BlueCross and BlueShield of South Carolina



### IMPORTANT

To locate the appropriate updated Clinical Policies for BlueCross and BlueShield of South Carolina, please go to: <https://www.southcarolinablues.com/web/public/brands/sc/providers/policies-and-authorizations/medical-policies/>



### TIP

A National Coverage Determination (NCD) or Local Coverage Determination (LCD) may be necessary to review for Medicare participants. Please go to: <https://www.cms.gov/medicare-coverage-database/search.aspx> for the latest coverage determination information.

## Internal Use Only

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## 2024 Shoulder Arthroplasty

### Musculoskeletal Procedures

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## Shoulder Arthroplasty Contraindications and/or Exclusions

A shoulder arthroplasty procedure may be contraindicated or excluded when the documentation demonstrates **ANY** of the following:

1. Allergy to medical treatment material
2. Corticosteroid injection in the operative joint *within the 12 weeks before surgery*.
3. Dental hygiene is poor (major dental work should be done prior to arthroplasty).
4. Infection, systematic or local, that is active, in treatment or is ongoing.

5. Neurological condition that results in **ANY** of the following:
  - A. Charcot arthropathy
  - B. Chronic regional pain syndrome (CPRS) or a variant of CPRS.
  - C. Deltoid **OR** rotator cuff with loss of function. [88]
6. Nicotine/tobacco use within 6 weeks of surgery
7. Shoulder arthroscopy on affected side *within 12 weeks preceding* arthroplasty.

## Reverse Total Shoulder Arthroplasty (RTSA) Guideline

A reverse total shoulder arthroplasty (RTSA) is considered medically appropriate when the documentation demonstrates **ALL** of the following: [77]

1. **NO** Corticosteroid injection in the operative joint *within the 12 weeks before surgery*.
2. **NO** tobacco/nicotine used with abstinence *for at least 6 weeks pre-surgery*.
3. Clinically stable and comorbidities are managed (eg, absent infection, hypertension controlled) **AND** *if diabetic* a HgBA<sub>1c</sub> of 8% or less; **AND** *if drug dependency* individual is undergoing managed treatment..
4. Shoulder functional impairment (from normal) effecting activities of daily living (ADLs) or independent activities of daily living (IADLs). (ADLs include bathing, dressing, eating, toileting, etc. and IADLs include going to work/school, shopping, attending appointments)
5. Clinical condition includes **EITHER** of the following:
  - a. Fracture: acute 2, 3, or 4-part fractures of proximal humerus with or without concomitant tuberosity demonstrated on X-ray **OR** painful malunion of proximal humerus fracture with rotator cuff dysfunction (eg, weakness, impingement).
  - b. Osteoarthritis with **ALL** of the following:
    - i. Arthritis is **ANY** of the following:
      - A. Advanced osteoarthritis (Tönnis grade 2 or 3)
      - B. Inflammatory arthropathy
      - C. Post-traumatic arthritis
      - D. Rheumatoid arthritis
    - ii. Bone stock can handle fixation.
    - iii. Conservative therapy attempted including **ALL** of the following:
      - A. Physical therapy (PT) program that is supervised by a licensed physical therapist or chiropractor for *at least 6 weeks in the past 6*

months with **NO** improvement in symptoms or functional ability.<sup>1</sup>

**\*NOTE:** *If PT notes demonstrate improvement in pain or functional ability, additional conservative therapy (non-surgical) is required, with a reevaluation of pain and functional status prior to considering surgical intervention.*

B. Treatment includes **ANY** of the following:

- I. Activity modification with protective weight-bearing **OR** use of a brace/orthotic.
- II. Corticosteroid injection, intraarticular
- III. Medication pain management (eg, NSAIDs, analgesics)
- iv. Deltoid is intact.
- v. Pain and range-of-motion (ROM) is limited with an inability to flex the upper extremity to 90 degrees unassisted.
- vi. Rotator cuff is irreparable with massive substantial partial tear **OR** full-thickness tear with significant rotator cuff dysfunction (eg, impingement signs, weakness).
- vii. X-rays demonstrate bone-on-bone articulation, severe joint space narrowing (complete or near-complete) and/or bone deformity.
- c. Rotator cuff repair failure history with severe pain.
- d. Rotator cuff tear is massive, irreparable with an intact deltoid **AND** there is inability to elevate the arm above the shoulder-level (90 degrees) (eg, pseudo-paralysis).
- e. Total shoulder arthroplasty (TSA) failure **AND** irreparable rotator cuff
- f. Tumor resection history

## Revision Shoulder Arthroplasty Guideline

A revision of a prior shoulder arthroplasty is considered medically appropriate when the documentation demonstrates **ALL** of the following: [88]

1. **NO** Corticosteroid injection in the operative joint *within the 12 weeks before surgery*.
2. **NO** tobacco/nicotine used with abstinence *for at least 6 weeks pre-surgery*.
3. Clinically stable and comorbidities are managed (eg, absent infection, hypertension controlled) **AND** *if diabetic* a HgBA<sub>1c</sub> of 8% or less.

<sup>1</sup>A home exercise program that is self-managed or is **NOT** supervised by PT or a chiropractor is insufficient to meet this indication.

4. Shoulder functional impairment (from normal) effecting activities of daily living (ADLs) or independent activities of daily living (IADLs). (ADLs include bathing, dressing, eating, toileting, etc. and IADLs include going to work/school, shopping, attending appointments)
5. **ABSENT** evidence of active, ongoing or undertreated joint infection.
6. Prosthesis removal due to failure or infection.
7. Clinical findings include **ANY** of the following:
  - a. Dislocation, instability or subluxation is recurrent.
  - b. Infection or fracture peri-prosthetic procedure
  - c. Loosening, aseptic
  - d. Osteolysis
  - e. Prosthetic device component failure, instability or recall
  - f. Synovitis is symptomatic from known cause (eg, metallosis).

## Shoulder Hemiarthroplasty (Partial Shoulder or Resurfacing Arthroplasty) Guideline

A hemiarthroplasty is considered medically appropriate when the documentation demonstrates **ALL** of the following: [88] [35]

1. **NO** Corticosteroid injection in the operative joint *within the 12 weeks before surgery*.
2. **NO** tobacco/nicotine used with abstinence *for at least 6 weeks pre-surgery*.
3. Clinically stable and comorbidities are managed (eg, absent infection, hypertension controlled) **AND** *if diabetic* a HgBA<sub>1c</sub> of 8% or less; **AND** *if drug dependency* individual is undergoing managed treatment..
4. Shoulder functional impairment (from normal) effecting activities of daily living (ADLs) or independent activities of daily living (IADLs). (ADLs include bathing, dressing, eating, toileting, etc. and IADLs include going to work/school, shopping, attending appointments)
5. Clinical condition includes **ANY** of the following situations:
  - a. Avascular necrosis is symptomatic with associated functional loss.
  - b. Fracture, acute, of the proximal humerus that is 3 or 4 parts. [38]
  - c. Osteoarthritis with **ALL** of the following:
    - i. Arthritis is **ANY** of the following:
      - A. Advanced osteoarthritis (Tönnis grade 2 or 3) of the humeral head (**NOT** glenoid)

- B. Inflammatory arthropathy
  - C. Post-traumatic arthritis
  - D. Rheumatoid arthritis
- ii. Bone stock can handle fixation.
- iii. Conservative therapy attempted including **ALL** of the following:
  - A. Physical therapy (PT) program that is supervised by a licensed physical therapist or chiropractor for at least 6 weeks in the past 6 months with **NO** improvement in symptoms or functional ability.<sup>2</sup>  
*\*NOTE: If PT notes demonstrate improvement in pain or functional ability, additional conservative therapy (non-surgical) is required, with a reevaluation of pain and functional status prior to considering surgical intervention.*
  - B. Treatment includes **ANY** of the following:
    - I. Corticosteroid injection, intraarticular, subacromial or bicipital groove
    - II. Medication pain management (eg, NSAIDs, analgesics)
- iv. Deltoid is intact.
- v. Pain and range-of-motion (ROM) is limited with an inability to flex the upper extremity to 90 degrees unassisted.
- vi. Rotator cuff is irreparable with massive substantial partial tear **OR** full-thickness tear with significant rotator cuff dysfunction (eg, impingement signs, weakness).
- vii. X-rays demonstrate bone-on-bone articulation, severe joint space narrowing (complete or near-complete) and/or bone deformity.

## Total Shoulder Arthroplasty (TSA) or Resurfacing Guideline

A total shoulder arthroplasty is considered medically appropriate when the documentation demonstrates **ALL** of the following: [35] [88]

1. **NO** Corticosteroid injection in the operative joint *within the 12 weeks before surgery*.
2. **NO** glenohumeral osteoarthritis **OR** irreparable rotator cuff.
3. **NO** tobacco/nicotine used with abstinence *for at least 6 weeks pre-surgery*.

<sup>2</sup>A home exercise program that is self-managed or is **NOT** supervised by PT or a chiropractor is insufficient to meet this indication.



4. Clinically stable and comorbidities are managed (eg, absent infection, hypertension controlled) **AND** *if diabetic* a HgBA<sub>1c</sub> of 8% or less; **AND** *if drug dependency* individual is undergoing managed treatment..
5. Shoulder functional impairment (from normal) effecting activities of daily living (ADLs) or independent activities of daily living (IADLs). (ADLs include bathing, dressing, eating, toileting, etc. and IADLs include going to work/school, shopping, attending appointments)
6. Clinical condition includes **ANY** of the following:
  - a. Avascular necrosis is symptomatic with associated functional loss.
  - b. Fracture, malunion/non-union, of the femoral head or comminuted fracture of the proximal humerus.
  - c. Cancer, primary or metastatic, involving the glenohumeral joint or adjacent soft tissues.
  - d. Osteotomy with functional loss to ROM.
  - e. Osteoarthritis with **ALL** of the following:
    - i. Arthritis is **ANY** of the following:
      - A. Advanced osteoarthritis (Tönnis grade 2 or 3)
      - B. Inflammatory arthropathy
      - C. Post-traumatic arthritis
      - D. Rheumatoid arthritis
    - ii. Bone stock can handle fixation.
    - iii. Conservative therapy attempted including **ALL** of the following:
      - A. Physical therapy (PT) program that is supervised by a licensed physical therapist or chiropractor for *at least 3 months in the past 6 months* with **NO** improvement in symptoms or functional ability.<sup>3</sup>  
**\*NOTE:** *If PT notes demonstrate improvement in pain or functional ability, additional conservative therapy (non-surgical) is required, with a reevaluation of pain and functional status prior to considering surgical intervention.*
      - B. Treatment includes **ANY** of the following:
        - I. Corticosteroid injection, intraarticular

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<sup>3</sup>A home exercise program that is self-managed or is **NOT** supervised by PT or a chiropractor is insufficient to meet this indication.

## II. Medication pain management (eg, NSAIDs, analgesics)

- iv. Deltoid is intact.
- v. Pain and range-of-motion (ROM) is limited with an inability to flex the upper extremity to 90 degrees unassisted.
- vi. Rotator cuff is intact or repairable.
- vii. X-rays demonstrate bone-on-bone articulation, severe joint space narrowing (complete or near-complete) and/or bone deformity.

## Procedure Codes

**Table 1. Shoulder Arthroplasty and Open Surgery Associated Procedure Codes**

CODE	DESCRIPTION
23334	Removal of prosthesis, includes debridement and synovectomy when performed; humeral or glenoid component
23335	Removal of prosthesis, includes debridement and synovectomy when performed; humeral and glenoid components (eg, total shoulder)
23470	Arthroplasty, glenohumeral joint; hemiarthroplasty
23472	Arthroplasty, glenohumeral joint; total shoulder (glenoid and proximal humeral replacement (eg, total shoulder).
23473	Revision of total shoulder arthroplasty, including allograft when performed; humeral or glenoid component
23474	Revision of total shoulder arthroplasty, including allograft when performed; humeral and glenoid component

## Shoulder Arthroplasty Summary of Changes

Shoulder Arthroplasty guideline from 2023 to 2024 had the following changes:

- Citations updated per the evidence.
- Conservative therapy parameters (eg, timeframes, defining measures) were clarified.
- Reorganized to improve usability, that included moving clinical contraindications (eg, preoperative clinical requirements) to the beginning of the guideline, as first set of criteria.
- **Shoulder Arthroplasty Contraindications:**
  - Added "infection, systemic or local, that is active, in treatment or is ongoing."
  - Added "nicotine use within 6 weeks of surgery"
- **Reverse Total Shoulder Arthroplasty (RTSA) guideline:**
  - Added the following criteria:
    - Rotator cuff repair failure history with severe pain.

- Rotator cuff tear is massive, irreparable with an intact deltoid **AND** there is inability to elevate the arm above the shoulder-level (90 degrees) (eg, pseudo-paralysis).
- Total shoulder arthroplasty (TSA) failure **AND** irreparable rotator cuff
- Tumor resection history
- Changed, "clinical condition includes, fracture: acute 2, 3, or 4-part fractures of proximal humerus with or without concomitant tuberosity demonstrated on X-ray," to:
  - "Clinical condition includes fracture: acute 2, 3, or 4-part fractures of proximal humerus with or without concomitant tuberosity demonstrated on X-ray **OR** painful malunion of proximal humerus fracture with rotator cuff dysfunction (eg, weakness, impingement)."
- Updates under, "osteoarthritis with **ALL** of the following:" was updated with the following::
  - Added bone stock can handle fixation
  - Added post-traumatic arthritis and rheumatoid arthritis to the different types of arthritis.
  - Added X-rays demonstrate bone-on-bone articulation, severe joint space narrowing (complete or near-complete) and/or bone deformity.
  - Removed age 60 or greater from rotator cuff tear.
  - Removed pseudoarthritis (not able to elevate arm above the shoulder 90 degrees OR prior rotator cuff has failed, presenting with severe pain and functional impairment.
- Removed the following from, "X-rays (ancillary or AP) demonstrate loss or nearly complete loss of joint space:"
  - Advance glenoid bone loss
  - Excessive retroversion
  - Note that states, "MRI should NOT be the primary imaging study to determine extent of disease."
- Removed age requirement of over 60 years old, for treatment of arthritis.
- **Revision Shoulder Arthroplasty** guideline:
  - Added clinical findings:
    - Dislocation, instability or subluxation is recurrent.

- Infection or fracture peri-prosthetic procedure
- Loosening, aseptic
- Osteolysis
- Prosthetic device component failure, instability or recall
- Synovitis is symptomatic from known cause (eg, metallosis).
- Removed hemiarthroplasty may convert to a total shoulder arthroplasty or reverse shoulder arthroplasty when age is over 60 years.
- **Shoulder Hemiarthroplasty** guideline:
  - Added the following:
    - Arthritis is any of the following:
      - Advanced osteoarthritis (Tönnis grade 2 or 3) of the humeral head (NOT glenoid)
      - Inflammatory arthropathy
    - Clinical condition includes:
      - Avascular necrosis is symptomatic with associated functional loss.
      - Fracture, acute, of the proximal humerus that is 3 or 4 parts.
    - Comprehensive examples to activities of daily living (ADLs).
  - Changed the following:
    - "Imaging/exam (MRI, X-ray, examination) demonstrates that deltoid and rotator cuff are functional and intact (adequate abduction strength)," *to*, "deltoid is intact."
    - "Osteoarthritis or inflammatory, non-infectious arthritis (eg, rheumatoid, psoriatic)," *to*, "Rotator cuff is irreparable with massive substantial partial tear or full-thickness tear with significant rotator cuff dysfunction (eg, impingement signs, weakness)."
    - X-rays (axillary or AP) demonstrate loss or nearly complete loss of joint space changed *to*, "X-rays demonstrate bone-on-bone articulation, severe joint space narrowing (complete or near-complete) and/or bone deformity."
  - Removed, "MRI should not be the primary imaging study to determine extent of disease."
  - Removed, "humeral head has osteonecrosis or vascular necrosis without advanced glenoid disease."

- **Total Shoulder Arthroplasty (TSA) or Resurfacing** guideline:
  - Added:
    - Avascular necrosis is symptomatic with associated functional loss.
    - Corticosteroid injection timeframe for not being used *within the 12 weeks before surgery*.
    - Fracture, malunion/non-union, of the femoral head or comminuted fracture of the proximal humerus.
    - **NO** glenohumeral osteoarthritis **OR** irreparable rotator cuff.
  - Under, "osteoarthritis with all of the following:" added:
    - Bone stock can handle fixation
    - Additional types of arthritis:
      - Advanced osteoarthritis (Tönnis grade 2 or 3)
      - Inflammatory arthropathy
    - Deltoid is intact
    - Pain and range-of-motion (ROM) is limited with an inability to flex the upper extremity to 90 degrees unassisted.
    - Rotator cuff is intact or repairable.
    - X-rays demonstrate bone-on-bone articulation, severe joint space narrowing (complete or near-complete) and/or bone deformity.

## 2024 Shoulder Arthroscopy

### Musculoskeletal Procedures

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## Shoulder Lysis of Adhesions and Capulotomy/Capsular Release Guideline

Shoulder capsulorrhaphy is considered medically appropriate when the documentation demonstrates **ALL** of the following: [6] [76] [19]

1. **NO** evidence of significant arthritis (Kellgren-Lawrence grade 2 or higher).
2. **NO** tobacco/nicotine used with abstinence *for at least 6 weeks* pre-surgery.
3. Clinically stable and comorbidities are managed (eg, absent infection, hypertension controlled) **AND** *if diabetic* a HgBA<sub>1c</sub> of 8% or less.
4. **NO** fracture or soft tissue injury on X-ray **AND** MRI.
5. Multidirectional shoulder instability (MCI) is recurrent due to hyperlaxity or mobility and **NO** traumatic dislocation.
6. Physical therapy (PT) was clinically managed (ie, qualified licensed clinician performs assessments, creates care plan and monitors outcomes) *for at least 3 months in the past 6 months* with **NO** improvement in symptoms or functional ability. *If PT notes demonstrate improvement in pain or functional ability, additional non-surgical conservative therapy is required with a reevaluation of pain and functional status prior to surgical intervention.*<sup>4</sup>
7. PT included activity modification in treatment plan.
8. Shoulder functional impairment (from normal) and pain effecting activities of daily living (ADLs). (ADLs include bathing, dressing, eating, toileting, etc.)
9. Physical exam demonstrates repeatable increased glenohumeral joint translation (greater than 1 cm of movement during the sulcus test).

## Diagnostic Shoulder Arthroscopy Guideline

A diagnostic shoulder arthroscopy is considered medically appropriate when the documentation demonstrates **ALL** of the following: [51]

1. **NO** other known conditions with similar presentation, including **ANY** of the following: [27]  
[59]
  - a. Arthritis
  - b. Brachial plexus disorders
  - c. Fracture
  - d. Neck pain, referred
  - e. Thoracic outlet syndrome
2. Physical exam findings demonstrate abnormality compared to unaffected side with **ANY** of the following:

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<sup>4</sup>A home exercise program that is self-managed or that does not provide sufficient clinical oversight is not considered adequate enough to meet this indication.

- a. Impingement signs (eg, top/outer-side shoulder pain, pain on lifting, weakness) are present. [51]
  - b. Range-of-motion (ROM) is limited (active or passive).
  - c. Strength loss is measurable.
3. Shoulder functional impairment (from normal) with pain, effecting activities of daily living (ADLs) or independent activities of daily living (IADLs) *for at least 6 months*. (ADLs include bathing, dressing, eating, toileting, etc. and IADLs include going to work/school, shopping, attending appointments)
4. Conservative therapy attempted including **ALL** of the following:
  - a. Physical therapy (PT) was clinically managed (ie, qualified licensed clinician performs assessments, creates care plan and monitors outcomes) for *at least 3 months in the past 6 months* with **NO** improvement in symptoms or functional ability. *If PT notes demonstrate improvement in pain or functional ability, additional non-surgical conservative therapy is required with a reevaluation of pain and functional status prior to surgical intervention.*<sup>5</sup>
  - b. Treatment includes **ANY** of the following:
    - i. Corticosteroid injection, bicipital groove, intraarticular or subacromial
    - ii. Medication pain management (eg, NSAIDs, analgesics)
5. X-ray and MRI are indeterminate for internal derangement/pathology.

## Shoulder Foreign or Loose Body Removal Guideline

Removal of a foreign or loose body in the shoulder joint is considered medically appropriate when the documentation demonstrates **ALL** of the following: [70]

1. **NO** evidence of significant arthritis (Kellgren-Lawrence grade 2 or higher).
2. **NO** tobacco/nicotine used with abstinence *for at least 6 weeks* pre-surgery.
3. **NO** other known conditions with similar presentation, including **ANY** of the following: [27] [59]
  - a. Arthritis
  - b. Brachial plexus disorders
  - c. Fracture

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<sup>5</sup>A home exercise program that is self-managed or that does not provide sufficient clinical oversight is not considered adequate enough to meet this indication.

- d. Neck pain, referred
- e. Thoracic outlet syndrome
- 4. Clinically stable and comorbidities are managed (eg, absent infection, hypertension controlled) **AND** if diabetic a HgBA<sub>1c</sub> of 8% or less.
- 5. CT or MRI demonstrates a loose body in the shoulder joint.
- 6. Failure of provider-directed, non-surgical management for *at least 3 months* in duration, **EXCEPT**, if the loose or foreign body has caused an acute restriction or severe symptomatology of shoulder joint range of motion (ie, locking).
- 7. Shoulder functional impairment (from normal) due to pain and mechanical signs (eg, clicking, popping) effecting activities of daily living (ADLs).

## Shoulder Manipulation Under Anesthesia (MUA) guideline

All requests for shoulder manipulation under anesthesia will be reviewed on a case by case basis.

## Shoulder Capsulorrhapy

Shoulder lysis of adhesions and/or capsulotomy/capsular release (with or without manipulation) is considered medically appropriate when the documentation demonstrates **ALL** of the following: [6] [76] [19]

- 1. **NO** evidence of significant arthritis (Kellgren-Lawrence grade 2 or higher).
- 2. **NO** tobacco/nicotine used with abstinence *for at least 6 weeks* pre-surgery.
- 3. Clinically stable and comorbidities are managed (eg, absent infection, hypertension controlled) **AND** if diabetic a HgBA<sub>1c</sub> of 8% or less.
- 4. Adhesive capsulitis/arthrofibrosis is chronic and refractory, from disease, injury or surgery.
- 5. Physical therapy (PT) was clinically managed (ie, qualified licensed clinician performs assessments, creates care plan and monitors outcomes) for *at least 3 months in the past 6 months* with **NO** improvement in symptoms or functional ability. *If PT notes demonstrate improvement in pain or functional ability, additional non-surgical conservative therapy is required with a reevaluation of pain and functional status prior to surgical intervention.*<sup>6</sup>
- 6. Shoulder functional impairment (from normal) and effecting activities of daily living (ADLs) *for at least 3 months*. (ADLs include bathing, dressing, eating, toileting, etc.)
- 7. Trauma history to shoulder **OR** post-operative contracture

<sup>6</sup>A home exercise program that is self-managed or that does not provide sufficient clinical oversight is not considered adequate enough to meet this indication.



## Anterior-Inferior Labral Tear (Bankhart) Repair Guideline

A labral anterior-inferior tear (Bankart lesion) repair is considered medically appropriate when the documentation demonstrates **ALL** of the following:

1. **NO** evidence of significant arthritis (Kellgren-Lawrence grade 2 or higher).
2. **NO** tobacco/nicotine used with abstinence *for at least 6 weeks* pre-surgery.
3. Clinically stable and comorbidities are managed (eg, absent infection, hypertension controlled) **AND** *if diabetic* a HgBA<sub>1c</sub> of 8% or less.
4. Clinical condition includes **ANY** of the following:
  - a. Combination tear
  - b. Instability (subluxation or dislocation) events are recurrent (2 or more episodes).
  - c. Pain, shoulder, acute onset following exercise or activity
5. Conservative therapy attempted *in the past 3 months* including **ALL** of the following:
  - a. Physical therapy (PT) program attempted for at least 6 weeks in the past 6 months that was clinically managed (ie, qualified licensed clinician performed assessment, created care plan and monitored outcomes) **AND** there was **NO** significant improvement in symptoms or functional ability. **\*NOTE:** *If PT notes demonstrate improvement in pain or functional ability, additional non-surgical conservative therapy is required with a reevaluation of pain and functional status prior to surgical intervention.*<sup>7</sup>
  - b. Treatment includes **ANY** of the following:
    - i. Corticosteroid injection, intraarticular, subacromial or bicipital groove
    - ii. Medication pain management (eg, NSAIDs, analgesics)
6. MRI or CT demonstrates anterior-inferior labral tear or bony Bankart. [61]
7. Physical exam demonstrates **ALL** of the following: [92] [92]
  - a. **NO** joint stiffness
  - b. Instability
  - c. Range-of-motion (ROM) is normal.
  - d. Positive results on **ANY** of the following tests:
    - i. Apprehension test

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<sup>7</sup>A home exercise program that is self-managed or that does not provide sufficient clinical oversight is not considered adequate enough to meet this indication.

- ii. Labral grind test
- iii. Objective laxity with pain.
- iv. Relocation test

## Posterior Labral Tear Repair Guideline

A posterior labral tear repair is considered medically appropriate when the documentation demonstrates **ALL** of the following: [41]

1. **NO** X-ray or MRI (axial) demonstrating significant degenerative disease (eg, posterior glenoid cartilage loss, subchondral glenoid cysts, mucoid degeneration of labrum, narrowing of joint space with posterior humeral head subluxation).
2. **NO** tobacco/nicotine used with abstinence *for at least 6 weeks* pre-surgery.
3. Clinically stable and comorbidities are managed (eg, absent infection, hypertension controlled) **AND** *if diabetic* a HgBA<sub>1c</sub> of 8% or less.
4. Conservative therapy attempted *in the past 3 months* including **ALL** of the following:
  - a. Physical therapy (PT) program *attempted for at least 6 weeks in the past 6 months* that was clinically managed (ie, qualified licensed clinician performed assessment, created care plan and monitored outcomes) **AND** there was **NO** significant improvement in symptoms or functional ability.\***NOTE:** *If PT notes demonstrate improvement in pain or functional ability, additional non-surgical conservative therapy is required with a reevaluation of pain and functional status prior to surgical intervention.*<sup>8</sup>
  - b. Treatment includes **ANY** of the following:
    - i. Corticosteroid injection, intraarticular, subacromial or bicipital groove
    - ii. Medication pain management (eg, NSAIDs, analgesics)
5. MRI demonstrates posterior labral tear.
6. Symptoms include **ANY** of the following tests:
  - a. Instability
  - b. Mechanical symptoms (eg, catching, popping) with pain
  - c. Pain

<sup>8</sup>A home exercise program that is self-managed or that does not provide sufficient clinical oversight is not considered adequate enough to meet this indication.

## Superior Labral Anterior-Posterior (SLAP) Tear Repair Guideline

Superior labral anterior-posterior (SLAP) tear repair is considered medically appropriate when the documentation demonstrates **ALL** of the following: **\*NOTE:** *Debridement is not a labral repair. SLAP debridement (limited, extensive debridement), biceps tenotomy or tenodesis may be alternatives.* [65] [84] [41]

1. **NO** evidence of significant arthritis (Kellgren-Lawrence grade 2 or higher).
2. **NO** tobacco/nicotine used with abstinence *for at least 6 weeks* pre-surgery.
3. Clinically stable and comorbidities are managed (eg, absent infection, hypertension controlled) **AND** *if diabetic* a HgBA<sub>1c</sub> of 8% or less.
4. Conservative therapy attempted *in the past 3 months* including **ALL** of the following:
  - a. Physical therapy (PT) program attempted for at least 6 weeks in the past 6 months that was clinically managed (ie, qualified licensed clinician performed assessment, created care plan and monitored outcomes) **AND** there was **NO** significant improvement in symptoms or functional ability. **\*NOTE:** *If PT notes demonstrate improvement in pain or functional ability, additional non-surgical conservative therapy is required with a reevaluation of pain and functional status prior to surgical intervention.*<sup>9</sup>
  - b. Treatment includes **ANY** of the following:
    - i. Corticosteroid injection, intraarticular, subacromial or bicipital groove
    - ii. Medication pain management (eg, NSAIDs, analgesics)
5. MRI demonstrates superior labral tear AND Type 2 or 4 SLAP tear (not type 1 or 3).
6. Physical exam is positive for **ANY** of the following tests:
  - a. Anterior slide test
  - b. Biceps load test (I and II)
  - c. Forced shoulder abduction and elbow flexion test
  - d. Lobe relocation test
  - e. O'Brien (active compression) test
  - f. Pain provocation test

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<sup>9</sup>A home exercise program that is self-managed or that does not provide sufficient clinical oversight is not considered adequate enough to meet this indication.

- g. Resisted supination on external rotation test
7. Shoulder functional impairment (from normal) and pain effecting activities of daily living (ADLs) or independent activities of daily living (IADLs) for *at least 3 months*. (ADLs include bathing, dressing, eating, toileting, etc. and IADLs include going to work/school, shopping, attending appointments)

## Rotator Cuff Repair (RCR) Contraindications or Exclusions

**ANY TYPE** of rotator cuff repair (RCR) may be contraindicated or excluded for **ANY** of the following: [64]

- Advanced or severe arthritis (eg, severe narrowing of glenohumeral space or bone-on-bone articulation, large osteophytes, subchondral sclerosis or cysts)
- Asymptomatic full-thickness rotator cuff tear
- Corticosteroid injection in the operative joint *within the 12 weeks before surgery*.
- Deltoid or rotator cuff paralysis [53]
- Infection, systematic or local, that is active, in treatment or is ongoing.

## Rotator Cuff Repair (RCR) Guideline

An arthroscopic rotator cuff repair (RCR) is considered medically appropriate when the documentation demonstrates **ALL** of the following:

1. **NO** Corticosteroid injection in the operative joint *within the 12 weeks before surgery*.
2. **NO** evidence of significant arthritis (Kellgren-Lawrence grade 2 or higher).
3. **NO** tobacco/nicotine used with abstinence *for at least 6 weeks* pre-surgery.
4. Clinically stable and comorbidities are managed (eg, absent infection, hypertension controlled) **AND** *if diabetic* a HgBA<sub>1c</sub> of 8% or less.
5. Clinical condition includes **ANY** of the following:
  - a. Tear is **EITHER** of the following:
    - i. Full-thickness tear with size increase of 50% or more demonstrated on serial imaging performed *at least 3 months* apart.
    - ii. X-ray demonstrates **NO** glenohumeral arthritis with a trauma-related, symptomatic rotator cuff tear.
  - b. Shoulder Impingement signs are present (ie, reproducible pain when arm is positioned overhead [above plane of shoulder] with relief of pain when arm is repositioned below the plane of the shoulder) and **ALL** of the following:

- i. Conservative therapy attempted *in the past 3 months* including **ALL** of the following:
  - A. Physical therapy (PT) was clinically managed (ie, qualified licensed clinician performs assessments, creates care plan and monitors outcomes) with **NO** improvement in symptoms or functional ability. *If PT notes demonstrate improvement in pain or functional ability, additional non-surgical conservative therapy is required with a reevaluation of pain and functional status prior to surgical intervention.*<sup>10</sup>
  - B. Large tears from 3 cm to 5 cm with PT attempted for *at least 12 consecutive weeks*, **ALL** other tears PT attempted for *at least 6 consecutive weeks*.
  - C. Treatment includes **ANY** of the following:
    - I. Corticosteroid injection, intraarticular, subacromial or bicipital groove
    - II. Medication pain management (eg, NSAIDs, analgesics)
- ii. MRI or ultrasound demonstrate **ANY** of the following:
  - A. Small, less than 1 cm full thickness tear
  - B. Medium, 1 cm to 3 cm
  - C. Large, 3 cm to 5 cm, full-thickness tear of 1 or more complete tendons
  - D. Partial thickness tear, articular-sided, concealed, or bursal-sided
- iii. Pain in rotator cuff in reproducible patterns (lateral arm, deltoid pain rarely radiating past the elbow, night pain, or pain with overhead motions).
- iv. Shoulder functional impairment (from normal) effecting activities of daily living (ADLs) or independent activities of daily living (IADLs). (ADLs include bathing, dressing, eating, toileting, etc. and IADLs include going to work/school, shopping, attending appointments)

## Revision to a Rotator Cuff Repair Guideline

A revision of a previously rotator cuff repair (RCR) will be reviewed on a case-by-case basis. Documentation **MUST** include:

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<sup>10</sup>A home exercise program that is self-managed or that does not provide sufficient clinical oversight is not considered adequate enough to meet this indication.

1. Revision RCR cases *more than 1 year* after an initial repair and again **MUST MEET RCR indications** (see Rotator Cuff Repair (RCR) Guideline).
2. MRI or CT arthrogram demonstrating failure of healing (Sugaya type 4 or 5) **OR** recurrent tear *more than 3 months* after index surgery.

## Partial Claviclectomy, Acromioplasty or Distal Clavicle Excision (DCE) Guideline

A partial claviclectomy, acromioplasty, and/or distal clavicle excision (DCE) is considered medically appropriate when the documentation demonstrates **ALL** of the following: [52] [22]

1. Conservative therapy attempted including **ALL** of the following:
  - a. Physical therapy (PT) program attempted for at least 6 weeks in the past 6 months that was clinically managed (ie, qualified licensed clinician performed assessment, created care plan and monitored outcomes) **AND** there was **NO** significant improvement in symptoms or functional ability.\***NOTE:** *If PT notes demonstrate improvement in pain or functional ability, additional non-surgical conservative therapy is required with a reevaluation of pain and functional status prior to surgical intervention.*<sup>11</sup>
  - b. Treatment includes **ANY** of the following:
    - i. Corticosteroid injection, bicipital groove, intraarticular or subacromial
    - ii. Medication pain management (eg, NSAIDs, analgesics)
2. Physical exam demonstrates pain over acromioclavicular joint and positive response to cross-body adduction test.
3. Shoulder functional impairment (from normal) and pain effecting activities of daily living (ADLs) or independent activities of daily living (IADLs) for *at least 3 months*. (ADLs include bathing, dressing, eating, toileting, etc. and IADLs include going to work/school, shopping, attending appointments)
4. X-ray or MRI demonstrate narrowed joint space (moderate to severe degenerative acromioclavicular joint disease, distal clavicle edema, distal clavicle osteolysis)

## Subacromial Decompression (SAD) Guideline

A subacromial decompression (SAD) is considered medically appropriate when the documentation demonstrates **ALL** of the following: [70] [29]

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<sup>11</sup>A home exercise program that is self-managed or that does not provide sufficient clinical oversight is not considered adequate enough to meet this indication.

1. **NO** evidence of significant arthritis (Kellgren-Lawrence grade 2 or higher).
2. **NO** tobacco/nicotine used with abstinence *for at least 6 weeks* pre-surgery.
3. Clinically stable and comorbidities are managed (eg, absent infection, hypertension controlled) **AND** *if diabetic* a HgBA<sub>1c</sub> of 8% or less.
4. SAD is done as a combination procedure with **ANY** of the following: **\*NOTE: SAD should not be done as a single procedure.**
  - a. Capsulorrhaphy [71]
  - b. Debridement [67]
  - c. Distal clavicle excision [22]
  - d. Labral repair [86]
  - e. Loose body removal [8]
  - f. Lysis of Adhesions
  - g. Rotator cuff repair (RCR) [46]
  - h. Synovectomy [36]
  - i. Tenodesis/tenotomy of biceps [70]
5. X-ray demonstrates mechanical outlet impingement (Bigliani type 3 morphology).

## Shoulder Synovectomy Guideline

A shoulder partial or complete synovectomy is considered medically appropriate when the documentation demonstrates **ALL** of the following:

1. **NO** evidence of significant arthritis (Kellgren-Lawrence grade 2 or higher).
2. **NO** tobacco/nicotine used with abstinence *for at least 6 weeks* pre-surgery.
3. Clinically stable and comorbidities are managed (eg, absent infection, hypertension controlled) **AND** *if diabetic* a HgBA<sub>1c</sub> of 8% or less.
4. Clinical condition includes **ANY** of the following:
  - a. Hemarthrosis, recurrent
  - b. Hemochromatosis
  - c. Hemophilia
  - d. Inflammatory arthritis (ie, rheumatoid arthritis, gout, pseudo-gout, psoriatic arthritis)
  - e. Synovitis, Lyme or non-specific



- f. Pigmented villonodular synovitis (PVNS)
  - g. Synovial chondromatosis
5. Conservative therapy attempted including **ALL** of the following:
  - a. Physical therapy (PT) was clinically managed (ie, qualified licensed clinician performs assessments, creates care plan and monitors outcomes) for *at least 3 months in the past 6 months* with **NO** improvement in symptoms or functional ability. *If PT notes demonstrate improvement in pain or functional ability, additional non-surgical conservative therapy is required with a reevaluation of pain and functional status prior to surgical intervention.*<sup>12</sup>
  - b. Treatment includes **ANY** of the following:
    - i. Corticosteroid injection, intraarticular
    - ii. Medication pain management (eg, NSAIDs, analgesics)
6. MRI or CT demonstrate primary synovial disease or effusion **OR** prior arthroscopy demonstrates secondary hypertrophic synovitis.
7. Shoulder functional impairment (from normal) effecting activities of daily living (ADLs) or independent activities of daily living (IADLs). (ADLs include bathing, dressing, eating, toileting, etc. and IADLs include going to work/school, shopping, attending appointments)

## Tenotomy and/or Tenodesis, Long Head Biceps (LHB) Guideline

A long head biceps (LHB) tenotomy or tenodesis is considered medically appropriate when the documentation demonstrates **ALL** of the following: **\*NOTE:** *Tenodesis is usually better for the very active, muscular and that regularly perform higher-demand activities. Tenotomy may be better for those smoke, due to healing problems in tenodesis.* [24] [33]

1. **NO** evidence of significant arthritis (Kellgren-Lawrence grade 2 or higher).
2. **NO** tobacco/nicotine used with abstinence *for at least 6 weeks* pre-surgery.
3. Clinically stable and comorbidities are managed (eg, absent infection, hypertension controlled) **AND** *if diabetic* a HgBA<sub>1c</sub> of 8% or less.
4. Clinical condition includes **ANY** of the following:
  - a. MRI or CT demonstrate long-head biceps hypertrophy, subluxation or tear.

<sup>12</sup>A home exercise program that is self-managed or that does not provide sufficient clinical oversight is not considered adequate enough to meet this indication.



- b. MRI demonstrates superior labral anterior-posterior (SLAP) tear.
  - c. Rotator cuff tear, full-thickness, repair meets medical necessity criteria (see Rotator Cuff Repair (RCR) Guideline).
  - d. SLAP tear repair failure
  - e. Tenosynovitis with evidence of being chronic AND long-head biceps groove pain.
5. Conservative therapy attempted *in the past 3 months* including **ALL** of the following:
- a. Physical therapy (PT) program *attempted for at least 6 weeks in the past 6 months* that was clinically managed (ie, qualified licensed clinician performed assessment, created care plan and monitored outcomes) **AND** there was **NO** significant improvement in symptoms or functional ability. **\*NOTE:** *If PT notes demonstrate improvement in pain or functional ability, additional non-surgical conservative therapy is required with a reevaluation of pain and functional status prior to surgical intervention.*<sup>13</sup>
  - b. Treatment includes **ANY** of the following:
    - i. Corticosteroid injection, intraarticular, subacromial or bicipital groove
    - ii. Medication pain management (eg, NSAIDs, analgesics)
6. Physical exam demonstrates **AT LEAST 2** of the following:
- a. Pain, anterior shoulder
  - b. Pain, anterior shoulder during resisted supination of the forearm (Yergason's test).
  - c. Speed's test is positive.
  - d. Biceps groove tenderness
  - e. Weakness
7. Shoulder functional impairment (from normal) and pain effecting activities of daily living (ADLs) or independent activities of daily living (IADLs) for *at least 3 months*. (ADLs include bathing, dressing, eating, toileting, etc. and IADLs include going to work/school, shopping, attending appointments)

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<sup>13</sup>A home exercise program that is self-managed or that does not provide sufficient clinical oversight is not considered adequate enough to meet this indication.

## Shoulder Arthroscopy Procedure Codes

**Table 1. Shoulder Arthroscopy Associated Procedure Codes**

CODE	DESCRIPTION
29805	Arthroscopy, shoulder, diagnostic, with or without synovial biopsy (separate procedure)
29806	Arthroscopy, shoulder, surgical; capsulorrhaphy
29807	Arthroscopy, shoulder, surgical; repair of SLAP lesion
29819	Arthroscopy, shoulder, surgical; with removal of loose body or foreign body
29820	Arthroscopy, shoulder, surgical; synovectomy, partial
29821	Arthroscopy, shoulder, surgical; synovectomy, complete
29822	Arthroscopy, shoulder, surgical; debridement, limited, 1 or 2 discrete structures (eg, humeral bone, humeral articular cartilage, glenoid bone, glenoid articular cartilage, biceps tendon, biceps anchor complex, labrum, articular capsule, articular side of the rotator cuff, bursal side of the rotator cuff, subacromial bursa, foreign body[ies])
29823	Arthroscopy, shoulder, surgical; debridement, extensive, 3 or more discrete structures (eg, humeral bone, humeral articular cartilage, glenoid bone, glenoid articular cartilage, biceps tendon, biceps anchor complex, labrum, articular capsule, articular side of the rotator cuff, bursal side of the rotator cuff, subacromial bursa, foreign body[ies])
29824	Arthroscopy, shoulder, surgical; distal claviclectomy including distal articular surface (Mumford procedure)
29825	Arthroscopy, shoulder, surgical; with lysis and resection of adhesions, with or without manipulation
29827	Arthroscopy, shoulder, surgical; with rotator cuff repair
29828	Arthroscopy, shoulder, surgical; biceps tenodesis

## Rotator Cuff Repair Procedure Codes

**Table 1. Rotator Cuff Repair Associated Procedure Codes**

CODE	DESCRIPTION
23410	Repair of ruptured musculotendinous cuff (eg, rotator cuff) open; acute
23412	Repair of ruptured musculotendinous cuff (eg, rotator cuff) open; chronic
23420	Reconstruction of complete shoulder (rotator) cuff avulsion, chronic (includes acromioplasty)
29827	Arthroscopy, shoulder, surgical; with rotator cuff repair

## Labral Repair Procedure Codes

**Table 1. Labral Repair Associated Procedure Codes**

CODE	DESCRIPTION
23455	Capsulorrhaphy, anterior; with labral repair (eg, Bankart procedure)
29807	Arthroscopy, shoulder, surgical; repair of SLAP lesion

CODE	DESCRIPTION
29822	Arthroscopy, shoulder, surgical; debridement, limited, 1 or 2 discrete structures (eg, humeral bone, humeral articular cartilage, glenoid bone, glenoid articular cartilage, biceps tendon, biceps anchor complex, labrum, articular capsule, articular side of the rotator cuff, bursal side of the rotator cuff, subacromial bursa, foreign body[ies])
29823	Arthroscopy, shoulder, surgical; debridement, extensive, 3 or more discrete structures (eg, humeral bone, humeral articular cartilage, glenoid bone, glenoid articular cartilage, biceps tendon, biceps anchor complex, labrum, articular capsule, articular side of the rotator cuff, bursal side of the rotator cuff, subacromial bursa, foreign body[ies])

## Shoulder Arthroscopy Summary of Changes

Shoulder Arthroscopy guideline from 2023 to 2024 had the following changes:

- Citations updated per the evidence.
- Conservative therapy parameters (eg, timeframes, defining measures) were clarified.
- Reorganized to improve usability, that included moving clinical contraindications (eg, preoperative clinical requirements) to the beginning of the guideline, as first set of criteria.
- **Diagnostic Shoulder Arthroscopy** guideline: added X-ray and MRI are indeterminate for internal derangement/pathology.
- **Revision to a Rotator Cuff Repair: NEW** guideline
- **Rotator Cuff Repair Contraindications:**
  - Added examples of advanced or severe arthritis.
  - Added full-thickness to asymptomatic rotator cuff tear.
- **Rotator Cuff Repair** guideline:
  - Added specific diabetic control parameters.
  - Added definitions to clarify content (eg, partial thickness tear, sizes of full thickness tears).
  - Removed the following:
    - Exam testing demonstrates rotator cuff weakness or severe pain.
    - MRI or ultrasound demonstrates a full-thickness tear that is larger than 5 cm (massive) with intact or repairable subscapularis tendon for superior capsular reconstruction.
    - NO fatty changes (eg, Goutallier stage 0 to 2 demonstrated).

- NO arthritis that is advanced or severe (eg, narrowing of glenohumeral space is severely narrowed, bone-on-bone articulation present, osteophytes are large, subchondral cysts or sclerosis present).
- Revision criteria
- **Shoulder Capsulorrhapy**
  - Activities of daily living (ADL) impairments of, "at least 3 months," was confirmed.
  - Added specific diabetic control parameters.
  - Conservative therapy's physical therapy being clinically managed for "at least 3 months in the past 6 months" was confirmed.
- **Shoulder Foreign or Loose Body Removal** guideline:
  - Added specific diabetic control parameters.
- **Shoulder Lysis of Adhesions and Capulotomy/Capsular Release** guideline:
  - Added specific diabetic control parameters.
  - Added tobacco abstinence timeframe of, " *for at least 6 weeks pre-surgery.*"
- **Shoulder Manipulation Under Anesthesia (MUA): NEW** guideline
- **Partial Claviclectomy, Acromioplasty or Distal Clavicle Excision (DCE)** guideline:
  - Activities of daily living (ADL) impairments of, "at least 3 months," was confirmed.
- **Posterior Labral Tear Repair** guideline:
  - Added specific diabetic control parameters.
  - Added tobacco abstinence timeframe of, " *for at least 6 weeks pre-surgery.*"
- **Superior Labral Anterior-Posterior (SLAP) Tear Repair** guideline:
  - Activities of daily living (ADL) impairments of, "at least 3 months," was confirmed.
  - Added:
    - Debridement vs. SLAP repair clarification was added.
    - Added specific diabetic control parameters.
    - Added, "MRI demonstrates superior labral tear AND Type 2 or 4 SLAP tear (not type 1 or 3)."
    - Added tobacco abstinence timeframe of, " *for at least 6 weeks pre-surgery.*"
    - Types of physical exam testing were added.

- Removed age parameter.
- **Shoulder Synovectomy: NEW** guideline
- **Tenotomy and/or Tenodesis, Long Head Biceps (LHB)** guideline:
  - Activities of daily living (ADL) impairments of, "at least 3 months," was confirmed.
  - Added specific diabetic control parameters.
  - Added prior test result and clinical condition requirements
  - Added tobacco abstinence timeframe of, " *for at least 6 weeks pre-surgery.*"
  - Removed age parameter.
- **Subacromial Decompression (SAD)** guideline:
  - Added specific diabetic control parameters.
  - Added examples/types of combination procedures.
  - Added tobacco abstinence timeframe of, " *for at least 6 weeks pre-surgery.*"

## Medically Appropriate Shoulder Procedures

Requests for the following procedure codes are considered medically appropriate:

**Table 1. Medically Appropriate Shoulder Procedure Codes**

Code	Description
23031	Incision and drainage, shoulder area; infected bursa
23035	Incision, bone cortex (eg, osteomyelitis or bone abscess), shoulder area
23040	Arthrotomy, glenohumeral joint, including exploration, drainage, or removal of foreign body
23044	Arthrotomy, acromioclavicular, sternoclavicular joint, including exploration, drainage, or removal of foreign body
23100	Arthrotomy, glenohumeral joint, including biopsy
23101	Arthrotomy, acromioclavicular joint or sternoclavicular joint, including biopsy and/or excision of torn cartilage
23107	Arthrotomy, glenohumeral joint, with joint exploration, with or without removal of loose or foreign body
23170	Sequestrectomy (eg, for osteomyelitis or bone abscess), clavicle
23172	Sequestrectomy (eg, for osteomyelitis or bone abscess), scapula
23174	Sequestrectomy (eg, for osteomyelitis or bone abscess), humeral head to surgical neck
23180	Partial excision (craterization, saucerization, or diaphysectomy) bone (eg, osteomyelitis), clavicle
23182	Partial excision (craterization, saucerization, or diaphysectomy) bone (eg, osteomyelitis), scapula
23184	Partial excision (craterization, saucerization, or diaphysectomy) bone (eg, osteomyelitis), proximal humerus
23190	Ostectomy of scapula, partial (eg, superior medial angle)
23195	Resection, humeral head

Code	Description
23400	Scapulopexy (eg, Sprengels deformity or for paralysis)
23480	Osteotomy, clavicle, with or without internal fixation;
23485	Osteotomy, clavicle, with or without internal fixation; with bone graft for nonunion or malunion (includes obtaining graft and/or necessary fixation)
23490	Prophylactic treatment (nailing, pinning, plating or wiring) with or without methylmethacrylate; clavicle
23491	Prophylactic treatment (nailing, pinning, plating or wiring) with or without methylmethacrylate; proximal humerus
23800	Arthrodesis, glenohumeral joint;
23802	Arthrodesis, glenohumeral joint; with autogenous graft (includes obtaining graft)

## 2024 Shoulder Surgery Associated Bundled Procedure Codes

**Table 1. Shoulder Surgery Associated Bundled Procedure Codes**

CODE	DESCRIPTION
23031	Incision and drainage, shoulder area; infected bursa
23035	Incision, bone cortex (eg, osteomyelitis or bone abscess), shoulder area
23140	Excision or curettage of bone cyst or benign tumor of clavicle or scapula;
23145	Excision or curettage of bone cyst or benign tumor of clavicle or scapula; with autograft (includes obtaining graft)
23146	Excision or curettage of bone cyst or benign tumor of clavicle or scapula; with allograft
23150	Excision or curettage of bone cyst or benign tumor of proximal humerus;
23155	Excision or curettage of bone cyst or benign tumor of proximal humerus; with autograft (includes obtaining graft)
23156	Excision or curettage of bone cyst or benign tumor of proximal humerus
23170	Sequestrectomy (eg, for osteomyelitis or bone abscess), clavicle
23172	Sequestrectomy (eg, for osteomyelitis or bone abscess), scapula
23174	Sequestrectomy (eg, for osteomyelitis or bone abscess), humeral head to surgical neck
23180	Partial excision (craterization, saucerization, or diaphysectomy) bone (eg, osteomyelitis), clavicle
23182	Partial excision (craterization, saucerization, or diaphysectomy) bone (eg, osteomyelitis), scapula
23184	Partial excision (craterization, saucerization, or diaphysectomy) bone (eg, osteomyelitis), proximal humerus
23190	Ostectomy of scapula, partial (eg, superior medial angle)
23195	Resection, humeral head
23200	Radical resection of tumor; clavicle
23210	Radical resection of tumor; scapula
23220	Radical resection of tumor, proximal humerus
23400	Scapulopexy (eg, Sprengels deformity or for paralysis)

CODE	DESCRIPTION
23405	Tenotomy, shoulder area; single tendon
23406	Tenotomy, shoulder area; multiple tendons through same incision
23480	Osteotomy, clavicle, with or without internal fixation;
23485	Osteotomy, clavicle, with or without internal fixation; with bone graft for nonunion or malunion (includes obtaining graft and/or necessary fixation)
23490	Prophylactic treatment (nailing, pinning, plating or wiring) with or without methylmethacrylate; clavicle

## Shoulder Surgery Definition Section

**Acetabularization** is concave erosion of the underside of the acromion.

**Achondroplasia** is the most common cause of dwarfism, or significantly abnormal short stature.

**Acromioclavicular joint (AC)** is the point at which the clavicle joins with the acromion.

**Acromion** is the outer end of the shoulder blade that forms the highest part of the shoulder and to which the collarbone is attached.

**Acromionectomy** is the resection of the acromion.

**Acromioplasty** is surgical reshaping of the acromion, frequently performed to remedy compression of the supraspinatus portion of the rotator cuff of the shoulder joint between the acromion and the greater tubercle of the humerus.

**Adhesive capsulitis** or frozen shoulder, occurs when the connective tissue enclosing the joint becomes thickened and tight, causing stiffness and pain in the shoulder joint.

**Ankylosis** is stiffness or fixation of a joint by disease or surgery.

**Apprehension test** is a test of joint instability. If instability is present, the patient displays concern or discomfort when a joint is put in a position of risk for dislocation.

**Arthrocentesis** is the surgical puncture of a joint especially for aspiration of fluid from the joint.

**Arthrodesis** is the surgical fusion of a joint.

**Arthrofibrosis** is a fibrotic joint disorder characterized by excessive collagen production and adhesions that result in restricted joint motion and pain.

**Arthrogram** is a medical imaging technique that allows imaging of a joint after injection of contrast material into the joint. Injection of the contrast material better allows for visualization of soft tissues around and within the joint (like tendons, cartilage, and ligaments). Arthrography may be done using X-ray imaging known as fluoroscopy, but CT scan and MRI arthrography are also performed.

**Arthroplasty** is the operative formation or restoration of a joint.

**Arthroscopy** is the examination of a joint, specifically, the inside structures. The procedure is performed by inserting a specifically designed illuminated device into the joint through a small incision. This instrument is called an arthroscope. The procedure of arthroscopy is primarily associated with the process of diagnosis.



**Arthrosis** is a degenerative disease of a joint.

**Arthrotomy** is cutting into a joint to expose its interior.

**Aseptic loosening** is the failure of joint prostheses without the presence of mechanical cause or infection.

**Atrophy** is a decrease in size or wasting away of a body part or tissue.

**Avascular necrosis** is localized death of bone tissue due to impaired or disrupted blood supply (as from traumatic injury or disease).

**Bankart lesion** is an anterior labral disruption with tearing of the attached periosteum, usually as a result of anterior dislocation.

**Bicep tenodesis** is a type of surgery used to treat a tear in the tendon that connects the biceps muscle to the shoulder.

**Bicep tenotomy** is a surgical procedure where the bicep tendon is cut at its base by the top of the shoulder socket and the tendon is allowed to retract out of the joint, allowing it to heal to the humerus over a few weeks.

**Brachial plexus palsy** is a condition that happens when the nerves of the brachial plexus (a set of nerves that control the muscles of the arm) have been damaged, causing the inability to move muscles in an area (paralysis).

**Bursitis** is swelling of the fluid filled sac or sac-like cavity that reduces friction between moving parts in the joints.

**Calcific tendonitis** is inflammation of the tendons.

**Capsulorrhaphy** is a suture of a joint capsule.

**Charcot shoulder** is a chronic and progressive joint disease most commonly caused by syringomyelia leading to the destruction of the shoulder joint and surrounding structures.

**Chondrolysis** is rapidly progressive loss of articular cartilage from a major joint (eg, hip, shoulder).

**Claviculectomy** is the surgical removal of all or part of a clavicle.

**Contralateral** is something that relates to the opposite side of the body.

**Coracoclavicular ligament** is the ligament that joins the clavicle and the coracoid process of the scapula.

**Dysplasia** describes the presence of abnormal cells within a tissue or organ. Dysplasia is not cancer, but may become cancer. Dysplasia can be mild, moderate or severe, depending on the degree of cell change under a microscope and the percentage of tissue or organ affected.

**Ehlers-Danlos syndrome** is a group of hereditary connective tissue disorders that manifests clinically with skin hyperelasticity, hypermobility of joints, atrophic scarring, and fragility of blood vessels.

**Ewing sarcoma** is a rare type of cancer that occurs in bones or in the soft tissue around the bones. Ewing sarcoma most often begins in the leg bones and in the pelvis.

**Excision** removal of tissue from the body using a scalpel (a sharp knife), laser, or other cutting tool. A surgical excision is usually done to remove a lump or other suspicious growth.



**Giant cell tumor** is a rare tumor that usually forms in bone, but may also form in cartilage, muscle, fat, blood vessels or other supportive tissue in the body. Most giant cell tumors occur at the ends of the long bones of the arms and legs near a joint (such as the knee, wrist, hip or shoulder). Most are benign (not cancer) but some are malignant (cancer). Giant cell tumors usually occur in young and middle-aged adults.

**Glenohumeral joint** is a ball and socket joint that includes a complex, dynamic, articulation between the glenoid of the scapula and the proximal humerus. Specifically, it is the head of the humerus that contacts the glenoid cavity (or fossa) of the scapula.

**Grind test** is a clinical test used to identify glenohumeral labial tearing.

**Hemiarthroplasty** is a type of hip surgery that involves replacing half of a major joint (eg, hip, shoulder).

**Hill-Sachs lesion** is a fracture in the long bone in the upper arm (humerus) that connects to the body at the shoulder.

**Humeral avulsion of the glenohumeral ligament (HAGL)** is an injury to the inferior glenohumeral ligament causing instability and/or pain and a missed cause of recurrent shoulder instability.

**Hyperplasia** is the enlargement of an organ or tissue caused by an increase in the reproduction rate of its cells, often as an initial stage in the development of cancer.

**Hypertrophy** is the excessive development of an organ or part, specifically an increase in bulk (as by thickening of muscle fibers) without multiplication of parts.

**Impingement** is the degenerative alteration in a joint in which there is excessive friction between joint tissues. This typically causes limitations in range of motion and the perception of joint pain.

**Incision and drainage** a surgical cut made to achieve access or to allow discharge of unwanted material such as pus.

**Ipsilateral** is something situated or appearing on or affecting the same side of the body.

**Ischemia** is a deficient supply of blood to a body part (such as the heart or brain) due to obstruction of the inflow of arterial blood.

**Labrum** a thick tissue or type of cartilage that is attached to the rim of the socket and essentially forms a bumper that deepens the socket and helps keep the ball in place.

**Laxity** is the state of being deficient in firmness.

**Limb length discrepancy** is a difference in size between the length of both arms or both legs.

**Load shift test** is an orthopedic shoulder test to assess anterior and posterior shoulder instability.

**Loose body** a small fragment of detached bone or cartilage that floats through the body, catching or locking in the joints.

**Malunion fracture** a fracture that has healed in a less than optimal position.

**Manipulation under anesthesia (MUA)** is a noninvasive treatment technique used to treat acute and chronic conditions, including muscular or spinal pain. Under anesthesia, spastic muscles are believed to relax and pain sensations diminish, which theoretically may permit joint manipulation through a full range of motion.

**Marfan syndrome** is a congenital connective tissue disorder that is primarily associated with cardiac pathology (eg, mitral valve prolapse, aortic root dilation), skeletal pathology (eg, lengthening of long bones, joint laxity) and ocular pathology (eg, ectopia lentis).

**Metastasis** is the spread of a disease-producing agency (such as cancer cells) from the initial or primary site of disease to another part of the body.

**Ollier's disease** is a rare disorder that causes benign (not cancer) growths of cartilage in the bones.

**Os acromiale** is an acromion that is joined to the scapular spine by fibrous, rather than by bony, union.

**Osteochondritis dissecans** is a joint disorder in which a segment of bone and cartilage starts to separate from the rest of the bone after repeated stress or trauma. The fragment may stay in place or fall into the joint space.

**Osteolysis** is dissolution or degeneration of bone tissue through disease.

**Osteomyelitis** is an infectious, inflammatory disease of bone. It is often painful, bacterial in origin and may result in the death of bone tissue.

**Osteosarcoma** is a malignant tumor derived from bone or containing bone tissue.

**Osteotomy** is the incision or transection of a bone.

**Polioomyelitis** is an acute infectious disease occurring sporadically or in epidemics and caused by a virus, usually a poliovirus but occasionally a coxsackievirus or echovirus. Called also polio.

**Posttraumatic arthritis** is inflammation in the joints that forms after a traumatic injury.

**Prophylactic treatment** is a procedure that is done by inserting metal into the bone in order to strengthen it well before it breaks. This type of surgery can be done in a minimally invasive fashion, and can reduce pain and prevent the major problems associated with fracture.

**Pseudoparalysis** is the apparent lack or loss of muscular power (as that produced by pain) that is not accompanied by true paralysis.

**Recalcitrant** is something that is difficult to treat, or resistant to commonly used treatments.

**Refractory** is resistance to treatment or cure.

**Relocation test** is a clinical test to identify the presence of anterior glenohumeral instability.

**Resection** is a surgical procedure done to remove tissue, or part or all of an organ.

**Retroversion** refers to turning or tilting backward, or the state of being turned or tilted back.

**Revision** is a new operation in a previous joint replacement during which one of the components are exchanged, removed, manipulated, or added. It includes excision arthroplasty and amputation, but not soft tissue procedures.

**Sarcomas** are rare cancers that develop in the bones and soft tissues including fat, muscles, blood vessels, nerves, deep skin tissues and fibrous tissues.

**Scapular winging**, also called scapula alta, occurs when the muscles of the scapula are too weak or paralyzed, resulting in a limited ability to stabilize the scapula. As a result, the medial or lateral borders of the scapula protrudes from back, like wings.

**Scapulopexy** is surgical fixation of the scapula.

**Scapulothoracic abnormal motion (STAM)** is a group of scapular conditions, including scapular dyskinesis and medial or lateral scapular winging, that can lead to chronic pain, weakness, limited motion, and deformity.

**Sequelae** is an after effect of a disease, condition, or injury.

**Subacromial stenosis** is a previously undescribed entity that causes narrowing of the height of the subacromial space without proximal migration of the humerus.

**Subchondral cyst** is a cyst situated beneath cartilage.

**Subluxation** is a partial or incomplete dislocation.

**Superior labrum anterior to posterior (SLAP) tear** is an injury to the labrum of the shoulder, which is the ring of cartilage that surrounds the socket of the shoulder joint.

**Synovectomy** is the surgical removal of a synovial membrane.

**Tendonesis** is a surgical procedure that is typically used to treat injuries to the biceps tendon in the shoulder.

**Tenosynovitis** is inflammation of a tendon sheath.

**Tenotomy** is the surgical division of a tendon.

**Thoracic outlet syndrome** is a term that refers to three related syndromes involving compression of the nerves, arteries, and veins in the lower neck and upper chest area. This compression causes pain in the arm, shoulder, and neck.

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## Disclaimer section

### Purpose

The purpose of the HealthHelp's clinical guidelines is to assist healthcare professionals in selecting the medical service that may be appropriate and supported by evidence to safely improve outcomes. Medical information is constantly evolving, and HealthHelp reserves the right to review and update these clinical guidelines periodically. HealthHelp reserves the right to include in these guidelines the clinical indications as appropriate for the organization's program objectives. Therefore the guidelines are not a list of all the clinical indications for a stated procedure, and associated Procedure Code Tables may not represent all codes available for that state procedure or that are managed by a specific client-organization.

### Clinician Review

These clinical guidelines neither preempt clinical judgment of trained professionals nor advise anyone on how to practice medicine. Healthcare professionals using these clinical guidelines are responsible for all clinical decisions based on their assessment. All Clinical Reviewers are instructed to apply clinical indications based on individual patient assessment and documentation, within the scope of their clinical license.

### Payment

The use of these clinical guidelines does not provide authorization, certification, explanation of benefits, or guarantee of payment; nor do the guidelines substitute for, or constitute, medical advice. Federal and State law, as well as member benefit contract language (including definitions and specific contract provisions/exclusions) take precedence over clinical guidelines and must be considered first when determining eligibility for coverage. All final determinations on coverage and



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payment are the responsibility of the health plan. Nothing contained within this document can be interpreted to mean otherwise.

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## National and Local Coverage Determination (NCD and LCD)



### NOTICE

To ensure appropriate review occurs to the most current NCD and/or LCD, always defer to <https://www.cms.gov/medicare-coverage-database/search.aspx>.

## Background

National Coverage Determinations (NCD) and Local Coverage Determinations (LCD) are payment policy documents outlined by the Centers for Medicare and Medicaid Services (CMS) and the government's delegated Medicare Audit Contractors (MACs) that operate regionally in jurisdictions. CMS introduced variation between different jurisdictions/Medicare Audit Contractors (MACs) and their associated covered code lists with the transition to ICD 10. The variation resulted in jurisdictions independently defining how codes are applied for exclusions, limitations, groupings, ranges, etc. for the medical necessity indications outlined in the NCD and LCD. Due to this variation, there is an inconsistent use/application of codes and coverage determinations across the United States between the different MACs.

In addition, **WITHOUT** notice, CMS can change the codes that indicate medical necessity and the format of the coverage determinations/associated documents (eg, Articles). This is an additional challenge for organizations to keep up with ongoing, unplanned changes in covered codes and medical necessity indications.

## Medical Necessity Codes

Due to the variation in code application between jurisdictions/MACs and that updates can happen without notification, HealthHelp is not able to guarantee full accuracy of the codes listed for any Coverage Determination, and advises that prior to use, the associated Coverage Determination



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Articles are reviewed to ensure applicability to HealthHelp's programs and any associated NCDs and LCDs.

### **For Internal Use Only:**

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